

**Translation**

**PATENT COOPERATION TREATY**

**PCT**

**INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY**

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference <b>8629 WO GEB-FRI</b>	FOR FURTHER ACTION See Form PCT/IPEA/416	
International application No. <b>PCT/EP2004/002938</b>	International filing date (day/month/year) <b>20.03.2004</b>	Priority date (day/month/year) <b>28.03.2003</b>
International Patent Classification (IPC) or national classification and IPC		
Applicant <b>ZF FRIEDRICHSHAFEN AG</b>		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 7 sheets, including this cover sheet.

3. This report is also accompanied by ANNEXES, comprising:

a. ☐ (sent to the applicant and to the International Bureau) a total of \_\_\_\_\_ sheets, as follows:

☐ sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).

☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.

b. ☐ (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) \_\_\_\_\_, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).

4. This report contains indications relating to the following items:

<input checked="" type="checkbox"/>	Box No. I	Basis of the report
<input type="checkbox"/>	Box No. II	Priority
<input type="checkbox"/>	Box No. III	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
<input type="checkbox"/>	Box No. IV	Lack of unity of invention
<input checked="" type="checkbox"/>	Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
<input type="checkbox"/>	Box No. VI	Certain documents cited
<input type="checkbox"/>	Box No. VII	Certain defects in the international application
<input type="checkbox"/>	Box No. VIII	Certain observations on the international application

Date of submission of the demand	Date of completion of this report
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

10/550231  
20 Mar 05

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/EP2004/002938

Box No. I

Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language \_\_\_\_\_, which is the language of a translation furnished for the purposes of:
- ☐ international search (Rule 12.3 and 23.1(b))
- ☐ publication of the international application (Rule 12.4)
- ☐ international preliminary examination (Rule 55.2 and/or 55.3)
2. With regard to the **elements** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:
- ☐ the international application as originally filed/furnished
- ☒ the description:
- pages 1-7 \_\_\_\_\_ as originally filed/furnished
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☒ the claims:
- nos. 1-9 \_\_\_\_\_ as originally filed/furnished
- nos.\* \_\_\_\_\_ as amended (together with any statement) under Article 19
- nos.\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- nos.\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☒ the drawings:
- sheets 1/2-2/2 \_\_\_\_\_ as originally filed/furnished
- sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- sheets\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

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Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement		
1. Statement			
Novelty (N)	Claims	1-5	YES
	Claims	6-9	NO
Inventive step (IS)	Claims		YES
	Claims	1-9	NO
Industrial applicability (IA)	Claims	1-9	YES
	Claims		NO
2. Citations and explanations (Rule 70.7)			
1. This report makes reference to the following documents:			
D1: US 4 577 737 A (HAMADA HIDEO ET AL) 25 March 1986 (1986-03-25)			
D2: US 6 026 941 A (MAIENSCHIN STEPHAN ET AL) 22 February 2000 (2000-02-22).			
2. INDEPENDENT CLAIM 1			
2.1 Document D1 is considered the closest prior art. It discloses (the references between parentheses relate to D1):			
"a hydrodynamic torque converter having an impeller (3) which can be driven by a driving engine and with which a turbine wheel (7) can be driven which is connected to a drive shaft (9) of a transmission, and having a torque measurement device (36, 38), wherein the turbine wheel (7) is linked to the torque measurement device (36, 38) (see figure 1a)",			

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Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;  
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from which the subject matter of independent claim 1 differs in that:

"a clutch is disposed between the impeller and the driving engine."

2.1.1 The subject matter of claim 1 is therefore novel (PCT Article 33(2)).

The problem to be solved by the present invention is therefore understood to be that of being able to adjust the power transmission.

2.1.2 Document D1 describes the same advantages for the clutch as the present application. Therefore, to a person skilled in the art it would be an obvious design measure to arrange the clutch between the driving engine and the impeller or the turbine wheel in order to solve the problem of interest.

Consequently, the subject matter of claim 1 would appear not to involve an inventive step (PCT Article 33(3)).

3. DEPENDENT CLAIMS 2-5

Claims 2-5 contain no features which, combined with the features of any claim to which they refer, meet the PCT requirements for inventive step.

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4.	<p>INDEPENDENT CLAIM 6</p> <p>4.1 The present application does not satisfy the requirements of PCT Article 33(1) because the subject matter of claim 6 is not novel within the meaning of PCT Article 33(2). Document D1 discloses (the references between parentheses relate to D1):</p> <p>"a hydrodynamic torque converter having an impeller (3) which can be driven by a driving engine and with which a turbine wheel (7) can be driven which is connected to a drive shaft (9) of a transmission, and having a torque measurement device (36, 38), wherein a clutch (2) is disposed between the turbine wheel (7) and the driving engine and the turbine wheel (7) is linked to the torque measurement device (36, 38) (see figure 1a)."</p>
5.	<p>DEPENDENT CLAIMS 7-9</p> <p>Claims 7-9 contain no features which, combined with the features of any claim to which they refer, meet the PCT requirements for novelty.</p>
6.	<p>OBSERVATIONS</p> <p>At present it is not clear which part of the application might serve as a basis for a claim that would satisfy the PCT requirements. However, should the applicant believe nevertheless that</p>

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Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

possible special features constitute a basis for a claim which satisfies the requirements of the PCT, he should explain this in a letter of reply and substantiate his assertion by indicating any differences with respect to the prior art and their significance. The applicant should further submit the claim containing any such special features. Accordingly, the features known in combination from the prior art (document D1) should be placed in the preamble (PCT Rule 6.3(b)(i)) and the remaining features should be specified in the characterizing part (PCT Rule 6.3(b)(ii)).

Pursuant to PCT Rule 5.1(a)(ii), the description should cite the prior art document D1. In the description the applicant should clearly state which features of the subject matter of independent claim 1 are already known from document D1.

The description should be brought into line with any new claims submitted.

The applicant's attention is drawn to the fact that the application may not be amended in such a way that the subject matter goes beyond the disclosure in the original application (PCT Article 34(2)(b)).

The applicant is requested to submit the amendments on replacement sheets, as defined in

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PCT Rule 66.8(a). In particular, clean copies of the amendments should be submitted in triplicate.

The applicant is further reminded that, pursuant to PCT Rule 66.8(a), the examiner may not make any alterations, however small, in the course of the PCT procedure.

To facilitate the examination of amended applications for compliance with PCT Article 34(2)(b), the applicant is requested to indicate clearly any amendments made, whether by addition, replacement or deletion, and to state by which passages in the original application these amendments are supported (see PCT Rule 66.8(a)).

If necessary, the above information may be handwritten on copies of the relevant parts of the original application.